AMENDMENTS TO THE CLAIMS

Please add or amend the claims to read as follows, and cancel without prejudice or disclaimer to resubmission in a divisional or continuation application claims indicated as cancelled:

1. (Currently Amended) A method of processing symbols of multipath components comprising:

detecting symbols in two or more received multipath components;

grouping symbols of the two or more received multipath components into at least first and second groups based on a delay of a desired symbol within the symbols of the two or more multipath components;

~~detecting a desired symbol by~~ allocating ~~at least~~ a first processing window to process the desired symbol within [[a]] said first group of multipath components; and

allocating a second processing window to process the desired symbol within [[a]] said second group of multipath components.

2. (Original) The method of claim 1, comprising:

combining a first output of the first processing window with a second output of the second processing window into a single output.

3. (Original) The method of claim 1, comprising:

determining a length for the first processing window, wherein the length of the first processing window is greater than a length of the desired symbol.

4. (Original) The method of claim 1, comprising:

determining a length of the second processing window, wherein the length of the second processing window is greater than a length of the desired symbol.

5. (Original) The method of claim 1, comprising:

positioning the first and second processing windows around the desired symbol within the first group and within the second group, respectively.

6. (Cancelled)

7. (Currently Amended) An apparatus comprising:

a receiver to output symbols of two or more received multipath components;

a processor to group symbols of said two or more multipath components into first and second groups based on a relative delay between the desired symbol within the first group of multipath components and the desired symbol within the second group of multipath components; and

a decoder having at least a first processing window unit to detect said [[a]] desired symbol within [[a]] said first group of multipath components and a second processing window unit to detect the desired symbol within [[a]] said second group of multipath components.

8. (Original) The apparatus of claim 7, comprising:

a combiner to combine a first output signal of the first processing window unit with a second output signal of the second processing window unit to provide a single output signal.

9. (Currently Amended) The apparatus of claim 7 ~~comprising a~~ wherein the processor is configured to determine a length of a first processing window of the first processing window unit and a length of a second processing window of the second processing window unit wherein, the length the first processing window and the length of the second processing window are greater then a length of the desired symbol.

10. (Original) The apparatus of claim 9, comprising:

a processor to position the first and second processing windows around the desired symbol within the first group and the second group, respectively.

11. (Cancelled)

12. (Currently Amended) A method comprising:

grouping symbols of two or more received multipath components of a received baseband signal in [[one]] two or more groups ~~for detecting~~ to detect a desired symbol, wherein, the grouping is based on a delay spread between the two or more components; and

processing said desired symbol in the two or more groups of symbols of the multipath components by positioning two or more processing windows around the desired symbol within the two or more groups, respectively.

13. (Original) The method of claim 12 wherein grouping comprises:

grouping symbols within a first delay spread range in a first group; and

grouping symbols within a second delay spread range in a second group.

14. (Original) The method of claim 12 comprising:

processing samples of the received baseband signal in the group by minimum mean squared error multiuser detection.

15. (Currently Amended) The method of claim 13 comprising:

applying first and second processing windows to the first and second groups ~~using~~, respectively; and

combining soft outputs of the first and second processing windows into a desired output related to a detected symbol.

16. (Currently Amended) The method of claim 12, comprising:

decoding by a processing window [[a]] the desired symbol within first and second groups;

delaying a first processing result of the first group and a second processing results of the second group; and

combining the first processing result with the second processing result.

17. (Currently Amended) The method of claim 15 comprising:

assigning ~~different sizes~~ first and second window lengths to the first and second processing windows, respectively.

18. (Currently Amended) The method of claim 15 comprising overlapping the first and second processing windows.

19. (Original) The method of claim 15 comprising:

adaptively positioning the first or the second processing windows to encompass the desired symbol based on a communication system parameter.

20. (Currently Amended) The method of claim 15 comprising:

fragmenting the desired symbol into at least first and second fragments; and

~~applying~~ adaptively positioning the first processing window to encompass the first fragment and the second processing window to encompass the second fragment.

21. (Currently Amended) The method of claim 12 comprising:

processing the desired symbol by applying to the symbols of the two or more received multipath components of the baseband signal at least one processing window to process the desired symbol in one group and at least one other processing window to process the desired symbol in two or more groups.

22. (Currently Amended) An apparatus comprising:

a receiver to provide symbols of two or more received multipath components;

a processor to group said symbols of the two or more multipath components into first and second groups based on a relative delay between the desired symbol of one multipath component and the desired symbol of another multipath component; and

a decoder having a processing window unit to decode [[a]] the desired symbol within said first and second groups of symbols of the two or more multipath components;

a first delay unit to delay a first processing result of the first group; and

a second delay unit to delay a second processing result of the second group.

23. (Original) The apparatus of claim 22 comprising:

a combiner to combine the first processing result with the second processing result.

24. (Original) The apparatus of claim 22 wherein the processing window unit comprises a two or more processing windows to processes samples of a received baseband signal in the first and second groups by minimum mean squared error multiuser detection.

25. (Original) The apparatus of claim 23 wherein the combiner to combine the first processing result with the second processing result by using a maximal ratio combining method.

26. (Currently Amended) A wireless communication device comprising:

an internal antenna to receive a signal having multipath components;

a processor to group symbols of two or more multipath components in first and second groups based on a relative delay between the desired symbol of one multipath component and the desired symbol of another multipath component; and

a decoder having at least a first processing window unit to detect [[a]] the desired symbol within [[a]] the first group ~~of the multipath components~~ and a second processing window unit to detect the desired symbol within [[a]] the second group ~~of the multipath components~~.

27. (Original) The wireless communication device of claim 26, comprising:

a combiner to combine a first output signal of the first processing window unit with a second output signal of the second processing window unit to provide a single output signal.

28. (Currently Amended) The wireless communication device of claim 26, ~~comprising~~ wherein the [[a]] processor is configured to determine a length of a first processing window of the first processing window unit and a second processing window of the second processing window unit wherein, the length the first processing window and the length of the second processing window are greater then a length of the desired symbol.

29. (Currently Amended) The wireless communication device of claim 28, ~~comprising:~~ wherein the [[a]] processor is configured to position the first and second processing windows of the first and second processing windows units around the desired symbol within the first group and the second group, respectively.

30. (Cancelled)

31. (Original) The wireless communication device of claim 28 wherein the first or second processing window processes samples of the received signal in the first and second groups by minimum mean squared error multiuser detection.

32. (Original) The wireless communication device of claim 27 wherein the combiner to combine the first processing result with the second processing result by using a maximal ratio combining method.

33. (Currently Amended) An article comprising: a computer-readable [[storage]] medium, having stored thereon instructions, that when executed, result in:

grouping symbols of two or more multipath components of a received baseband signal in [[one]] two or more groups for detecting a desired symbol based on a delay spread ~~of the two or more components~~ between the desired symbol of one multipath component to the desired symbol of another multipath component.

34. (Original) The article of claim 33 wherein the instructions when executed result in:

grouping symbols within a first delay spread range in a first group; and

grouping symbols within a second delay spread range in a second group.

35. (Currently Amended) The article of claim 33 wherein the instructions when executed result in:

processing samples of the symbols of the received baseband signal in the group by minimum mean squared error multiuser detection.

36. (Currently Amended) The article of claim 34 wherein the instructions when executed result in:

applying first and second processing windows to the first and second groups ~~using~~, respectively; and

combining soft outputs of the first and second processing windows into a desired output related to a detected symbol.

37. (New) The article of claim 33, wherein the instructions when executed result in: positioning two or more processing windows around the desired symbol within the two or more groups, respectively so as to encompass said desired symbols within said processing windows.